

In the claims:

Please rewrite the claims as follows:

17. (Amended Once) A coating thickness measuring instrument, comprising:
an inductive probe having a drive coil and a pickup coil;
a means for driving an alternating current in the drive coil;
a means for detecting the output of the pickup coil; and
a means for modifying the amplitude of the current in the drive coil in dependence
upon the output of the pickup coil.

18. (Amended Once) The instrument of claim 17, wherein the means for modifying the amplitude of the current in the drive coil comprises a control loop which is switchable in and out of operation to provide two modes of operation for the instrument.

19. (Amended Once) The instrument of claim 18, wherein the means for modifying the amplitude of the current in the drive coil comprises a first control loop which is switchable in and out of operation to provide two modes of operation for the instrument and wherein the means for driving a current in the drive coil comprises a second control loop arranged to maintain the amplitude of current in the drive coil at a substantially constant level.

20. (Amended Once) The instrument of claim 17, wherein the means for modifying the amplitude of the current in the drive coil comprises a first control loop which is switchable in and out of operation to provide two modes of operation for the instrument and wherein the means for driving comprises an amplitude controlled oscillator and the first control loop is implemented by a current to voltage rectifier, a low pass filter and an error amplifier.
